UNIVERSITY OF JOHANNESBURG

POLICY FOR THE MANAGEMENT OF STAFF, STUDENTS AND PATIENTS WHO ARE EXPOSED TO INFECTIOUS AGENTS	
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Related documents

UJ documents	Other
• Policy for the Management of accidental occupational exposure to blood or body fluids.	• Management of Occupational Exposure to the Human Immunodeficiency Virus (HIV): Department of Health, HIV/AIDS and STD Directorate 1999. • Guidelines for Sharps injury West Rand Sasohn, 2004.
Stakeholders affected by this document (units and divisions that should be familiar with it).	• Executive Deans: Faculties of Health Sciences and Science; • Heads: Academic Departments; • Lecturers (Part-time and Full-time); • Learners in Health Sciences and Sciences.
Website address of this document:	**www.uj.ac.za**

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1. INTRODUCTION

Some staff members and students in Health Sciences and Sciences are at risk to accidental occupational exposure to blood or body fluids infected with e.g. hepatitis B virus (HBV), hepatitis A virus (HAV), Hepatitis C (HCV) or the human immunodeficiency virus (HIV). Students working with patients are exposed to tuberculosis (TB) which is a potentially lethal disease.

These exposures could occur through a needle stick injury or cuts from sharp instruments contaminated with the patients infected blood, or through contact of the eyes, skin, mouth and nose with the patients blood. You can get TB by breathing in air droplets from a cough or sneeze of an infected person.

The University of Johannesburg (UJ) should ensure that it complies with the provisions of the Occupational Health and Safety Act, including the Regulations on Hazardous Biological Agents. This policy should deal with:

a) The risk of accidental occupational exposure in the workplace or place of study;
b) Appropriate training, awareness and education on the use of universal infection control to reduce the risk of accidental occupational exposure to infected blood and / or body fluids;
c) Providing appropriate equipment and materials to protect students from the risk of exposure to HIV, HBV or HCV;
d) Steps must be taken following a sharp injury including the management of accidental exposure to HIV and other blood borne pathogens, including post exposure prophylaxis (PEP);
e) The reporting of all such accidents;
f) Adequate monitoring of exposure to HIV and other blood borne pathogens to ensure that the requirements of possible compensation claims are being met.

2. DEFINITIONS:

2.1 **"Student"** shall mean a person registered full-time or part-time for a degree, diploma, licentiate or certificate of the University: provided that the registration of a student shall be deemed to continue until the first day of the academic year following that in which the Student was last registered as a student unless such registration has been cancelled by a student or cancelled or suspended by the University.

2.2 An "**exposure"** is defined as a percutaneous injury, contact with intact skin, contact with non-intact skin, (e.g. when skin is inflamed, chapped or

abraded) or by breathing in air droplets from a cough or sneeze of a TB infected person.

2.3 **Body fluids** include semen, vaginal secretions or other fluids contaminated with visible blood.

2.4 **"Patient**" is somebody who receives medical treatment.

3. RISK OF INFECTION AFTER ACCIDENTAL EXPOSURE

People who received Hepatitis A and B vaccines and have developed immunity to the virus are virtually at no risk for that specific infection. The risk for the unvaccinated person who are exposed to HBV-infected blood through a needle stick or cut is 6-30%.

The risk of infection after a needle stick or cut exposure to HCV-infected blood is approximately 1.8%.

The risk of HIV infection after a needle stick or cut exposure to HIV-infected blood is 0.3%. The risk of skin exposure to HIV infected blood is low, but it increases if:

a) The contact is prolonged;
b) The contact involves an extensive area of skin;
c) The skin is visibly compromised, i. e. open wounds, diseased or inflamed;
d) There is a high titre of HIV in the source patient's blood.

The risk after exposure of the eye, nose, mouth or broken skin to HIV-infected blood is less than 0.1%.

The risk of infection increases if:

a) The injury is deep;
b) The instrument involved is a hollow-bore needle;
c) There is visible blood on the device causing the injury;
d) The needle has been placed directly into a blood vessel;
e) The blood has a high viral load;
f) The source patient has advanced HIV disease (AIDS).

To minimize the risk of occupational transmission of HIV as well as other infectious diseases, everybody who may be exposed should adopt appropriate infection, risk assessment and accident prevention procedures – known as universal precautions.

Exposed individuals must comply with infection control procedures such as:

a) The use of protective equipment (i.e. gloves, aprons, protective eye wear and masks);
b) Covering skin lesions, cuts or abrasions with occlusive dressings;
c) Equipment that came in contact with blood and body fluids should be appropriately disinfected and sterilized.

Students and staff who are at risk are advised to get examined for TB before commencement of their studies/work and also be vaccinated against Hep A and B, tetanus, TB, meningitis, varicella, mumps, measles, rubella and annually for influenza. HBV vaccination is compulsory for all students who may be exposed to the disease. Each individual will sign an indemnity form stating that they were informed of the risk and had been advised to get these vaccinations. In a case of accidental exposure it will be the responsibility of the individual to seek the necessary medical attention and vaccinations for these diseases. The university will not be held responsible for the cost of this, neither if any of these diseases are contracted through contact with the disease during training at or working for the university.

With TB most people are asymptomatic when infected, however about 10% will progress to active disease.

4. UNIVERSAL PRECAUTIONS

Universal precautions are simple standards of infection control practices to be used during the care of patients, at all times, to reduce the risk of transmission of blood borne infections.

Exposed individuals can prevent many accidental occupational exposures to infected blood and body fluids by implementing the standard universal precautions and by adoption of procedures to sterilize and disinfect equipment in contact with blood or blood products.

These precautions are designed to prevent:

a) Penetration of the skin by contaminated sharp objects;
b) Contamination of skin, especially non-intact skin, and mucous membranes, especially the conjunctivae;
c) Prevent contracting TB by the use of face masks when working in high risk communities.

5. MANAGEMENT OF OCCUPATIONAL EXPOSURE TO BLOOD OR BODY FLUIDS

5.1 For all student and staff exposures (excluding Emergency Medical Care staff and students)

5.1.1 Clean the affected area immediately with an antiseptic agent and water and wipe with an alcohol swab;

5.1.2 Mucus membranes and eye exposures should be extensively rinsed and flushed with water;

5.1.3 The clinician supervising the clinic or a designated individual of the academic department must document and report the incident and refer the individual to Campus Health Services, i.e. students to the Primary Health Care sister (practitioner) on the campus where the incident occurred, usually DFC. Injured staff members are to be referred to the Occupational Health sister (practitioner). Injuries of

staff members will be handled as an injury on duty. If the sisters on DFC are not available it may also be reported to the Head of Occupational Health services or the Manager of Primary Health care, both situated on APK. All incidents are to be reported to the UJ Risk Manager situated in the financial department on the APK campus. If the incident occurred after hours it must be reported on the next working day;

5.1.4 The injured individual will be managed by the sisters of Campus Health. The injured individual will be counselled on HIV and Hepatitis and blood will be drawn for testing of HIV. Post Exposure Prophylaxis (PEP) anti-retroviral (ARV) treatment will commence and follow up visits will be done by the sisters. The cost of this will be carried by the university. If the injured person wishes to seek these services from another medical practitioner they may do so, but the costs will not be covered by the university;

5.1.5 The following are potential exposures that should be considered for PEP (post exposure prophylaxis):

a) A blood contaminated needle stick injury;
b) An injury with a blood contaminated sharp instrument or similar instruments contaminated with semen, CSF, pleural or other serous fluid (excluding urine and faeces);
c) An exposure to the mucous membranes (eye, mouth) with semen, CSF, pleural or other serous fluid (excluding urine and faeces);
d) A blood contamination of compromised or diseased skin (such as weeping eczema);
e) Prolonged exposure to a large volume of blood on normal skin.

5.2 For patients consulted by UJ staff and students

5.2.1 Clean the affected area immediately with an antiseptic agent and water and wipe with an alcohol swab;

5.2.2 Mucus membranes and eye exposures should be extensively rinsed and flushed with water;

5.2.3 The clinician supervising the clinic or a designated individual of the academic department must document and report the incident and refer the individual to the Primary Health Care sister on DFC. If the sister is not available the Manager of Primary Health Care on APK can be contacted telephonically;

5.2.4 The patient will be informed of the risks of a possible infection. The patient will receive a referral letter from the nursing practitioner and be advised to consult (as a matter of urgency) with a medical practitioner of their own choice. The costs incurred for the consultations, post exposure medication and laboratory tests may be claimed back from the university;

5.2.5 All incidents are to be reported to the UJ Risk Manager situated in the financial department on the APK campus.

5.3 For Emergency Medical Care staff and students

An external company is contracted to provide the service to staff and students of this department.

In the event of an exposure event, the member must immediately call the Medical Call Centre. The staff working at the medical call centre will provide the patient with step-by-step guidance as to what the patient needs to do. As a basic indication of the program procedure, the following key steps are followed:

STEP 1

Contact the emergency call centre where staff will:

a) Establish contact details of the caller;
b) Ascertain the nature of the incident and what assistance is required;
c) Establish the geographical location of the patient;
d) Establish, verify and record details of patient as well as membership details*;*
e) Counsel the individual on the procedure he/she must follow. The medical staff at the treatment facility will advise the patient on the procedure to follow should **they wish** to report the incident to the police;
f) Provide additional medical emergency advice if required.

STEP 2

The member is transferred (or call back is provided) to the HIV case manager or physician responsible for managing the specific process. The member is (if not done previously) counselled regarding the HIV exposure and the necessary medical protocol that needs to be followed.

STEP 3a (Emergency Post Exposure Pack (PEP) Available on Site)

The treating doctor and case manager will complete the following:

a) Counsel & advise the member regarding the PEP medication that is required;
b) Will instruct the member to take the necessary medication;
c) Will arrange for the necessary scrip to be faxed/e-mailed to the member;
d) Will set up an appointment at the closest available doctor for the initial emergency appointment at a time convenient to the member but within the next 5 to 24 hours (from initiation of the treatment).

STEP 3b (Emergency PEP Pack NOT Available on Site)

The treating doctor and case manager will complete the following:

a) Counsel & advise the member regarding the PEP medication that is required;

b) Will determine the best location for the member to collect their medication (this could be 1 of 3 options – the workplace PEP pack, a local pharmacy or network doctor);
c) Will advise the member to collect the necessary medication from the location chosen at the next available opportunity;
d) Will set up an appointment at the closest available doctor for the initial emergency appointment at a time convenient to the member but within the next 5 to 24 hours (from initiation of the treatment).

STEP 4

The appointment is held with the network doctor where the appropriate blood test is conducted, the member receives counselling and any other related medication for the specific case. The following medication is (where applicable) made available by the treating doctor. As specified, all treatment and prophylaxis protocols are determined by the treating doctor.

a) **ARV's**: Antiretroviral medication. Triple combination (various options available, again dependent on the specific circumstances of the case). ARV regime is prescribed for an initial period of 3 days and following the follow-up doctor consultation will be provided for a further 28 days.
b) **STI's**: Medicine for Sexually Transmitted Diseases (Other than HIV) is staggered/delayed to avoid acute pill load. They include treatment for various parasitic, bacterial and fungal infections.
c) **Antibiotics**: Standard protocol.
d) **Tranquilisers**: For mainly anxiolytic requirements and at higher doses also sedative, hypnotic and skeletal muscle relaxant requirements.
e) **Pregnancy**: the morning after or emergency contraceptive pill for termination of pregnancy.

STEP 5

Post treatment follow up by the dedicated Case Manager to ensure any necessary treatment adherence and to set up the two follow up appointments (with necessary follow up blood tests).

STEP 6

Follow up appointments with a doctor nominated by the service provider are scheduled, executed and paid for by service provider. The follow-up appointments are strictly related to the event for which the patient underwent emergency treatment as defined in the programme policy document.

STEP 7

Post treatment assessment and telephonic counselling will be provided by the service provider at no cost for 12 months following the event. Should additional third party medical treatment, medical reporting or any other procedures or medico-legal services be required, these will be for the account of the patient.

All injuries need to be reported to the UJ Risk Manager. Injuries of staff members also need to be reported to Occupational Health and Safety.

6. TUBERCULOSIS

6.1 Symptoms of TB

a) Cough sometimes producing phlegm;
b) Coughing up blood;
c) Excessive sweating, especially at night;
d) Fatigue;
e) Fever;
f) Unintentional weight loss;
g) Difficulty with breathing;
h) Chest pain;
i) Wheezing.

6.2 Factors that may increase the rate of TB infection in a population:

a) HIV infections and the immune-compromised;
b) Poor environment and nutrition;
c) The appearance of drug-resistant strains of TB.

6.3 Management of a suspected TB infection

If a student or staff member suspects that he/she may have been exposed or have TB, they are advised to consult with the sister at Campus Health. This would enable adequate management and follow up of the disease. Otherwise the person may consult with any other health practitioner they wish.